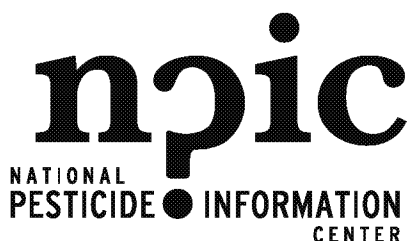


National Pesticide Information Center

2nd Quarter Report: May 15 - August 14, 2019

First Operational Year: 2/15/19 - 2/14/20

Cooperative Agreement # X8-83947901
Environmental and Molecular Toxicology
Oregon State University
310 Weniger Hall
Corvallis, OR 97331-6502
800-858-7378
npic.orst.edu



Environmental & Molecular Toxicology



Oregon State
University

DISCLAIMER

Material presented in this report is based on information as provided to NPIC by individuals who have contacted NPIC for information or to report a pesticide incident. None of the information reported to NPIC has been verified or substantiated by independent investigation by NPIC staff, laboratory analysis, or any other means. Based on the information provided, NPIC qualifies the information by assigning a certainty index (CI) and a severity index (SI). NPIC makes no claims or guarantees as to the accuracy of the CI, SI, or other information presented in its reports, other than that NPIC has done its best to accurately document and report the information provided to NPIC.

Table of Contents

Program Highlights and Summary.....	3
Objectives and Deliverables	4-10
Difficulties, Deviations, and Departures.....	10
Pesticide Data	11-16
Selected Cases of Interest	17-18
Quarterly Budget Expenditures	19

NPIC Mission Statement

- The primary mission of the National Pesticide Information Center (NPIC) is to provide objective information, collect and report incident data, use cutting edge technologies, and conduct extensive outreach to diverse audiences to promote a better understanding of pesticide use, with an overall goal of reducing risks to people, animals, and the environment.

General Compliance Statement

- Throughout the reporting period, NPIC has complied with the requirements of the U.S. Environmental Protection Agency (U.S. EPA) regarding Title VI of the Civil Rights Act of 1964 and Section 13 of the FWPCA Amendments of 1972.
- NPIC has complied with U.S. EPA Guidelines regarding procurement requirements stipulated in 40 CFR Part 33.
- NPIC has complied with all special requirements specified by U.S. EPA as part of the funding authorization of this project.

Submitted To:

US Environmental Protection Agency
Office of Pesticide Programs

Submitted by September 14, 2019 from:



Jeff Jenkins, PhD
Director/Principal Investigator

NPIC's place in the pesticide world

Using a toll-free phone line, email, voicemail, social media platforms, and a bilingual website, The National Pesticide Information Center (NPIC) provides objective, science-based information about pesticides and related topics to the public and professionals. When people describe pesticide incidents, NPIC documents details about the scenario using established protocols, including quality assurance/quality control.

NPIC services support federal pesticide registration with incident data to inform risk assessment, hotline services for pesticide registrants, and risk-communication materials for states/tribes.

- In support of timely, science-based pesticide registrations, there is a need for more data describing observed impacts (incidents) or lack thereof. These data serve federal and state-level risk assessors who face increasing scrutiny.
- Under the cooperative agreement between Oregon State University (OSU) and the Environmental Protection Agency (EPA), NPIC supports the pesticide registration process with quality incident data and phone service for smaller registrants.
- The Label Review Manual (LRM) strongly encourages registrants to include a non-emergency company phone number or toll-free hotline for consumers. "As an option, the National Pesticide Information Center (NPIC) hotline number may be used, with the suggested statement: "For information on this pesticide product (including general health concerns or pesticide incidents), call the National Pesticide Information Center at 800-858-7378, Monday through Friday, 8:00 AM to 12:00 PM Pacific Standard Time..." This is a valuable service used by several small- to mid-sized registrants.
- NPIC partners with state lead agencies and health departments to provide state-level incident data, partnership in materials-development, and hotline services in high-and low-visibility scenarios.

Program Highlights and Summary

- NPIC responded to 3,556 inquiries this quarter, including 2,588 phone calls, 512 emails, and 456 voicemails. The average call duration was 7.5 minutes.¹ NPIC responded to 44 inquiries in Spanish, two in Quichua, two in Tagalog, one in French, one in Italian, and one in American Sign Language.
- Most inquiries to NPIC came from members of the general public (89%). NPIC also responded to 52 inquiries from government/enforcement agencies, 25 inquiries from medical professionals (36% veterinary), 14 inquiries from pesticide retailer employees, and 10 inquiries from health agencies.
- The NPIC website received 2,244,202 pageviews, representing a 15% increase over the same quarter last year.¹ NPIC added new links to its website, as high-quality science and regulatory items were identified.
- No human deaths related to pesticides were reported to NPIC. Seventeen animal deaths were reported.

¹ This metric cannot be calculated by half-month. As such, these numbers represent the whole months of May - July 2019.

How are people finding NPIC?

1,187 from the internet (34.7%)	107 from medical/veterinary professionals (3.1%)
792 from a product label (23.2%)	38 from state pesticide regulatory agencies (1.1%)
382 from previous contact with NPIC or word of mouth (11.2%)	21 from EPA personnel (0.6%)
373 from pest control companies (10.9%)	18 from university extension (0.5%)
	498 from other/unknown entities (14.6%)

Objectives and Deliverables

1. Serve as a source of factual, unbiased information for diverse audiences including the agricultural and pest control community, healthcare providers, educators, consumers, and the general public.

Anticipated outcomes for Q2	Actual outcomes	Next quarter
Maintain open hours from 8:00am-12:00pm, Monday - Friday	NPIC maintained open hours from 8:00am to 12:00pm Pacific Time, Monday-Friday, excluding holidays, with no closures due to technical or staffing issues.	Maintain open hours from 8:00am-12:00pm, Monday - Friday
Maintain multilingual capabilities	NPIC maintained multilingual capabilities during 100% of operational hours.	Maintain multilingual capabilities
Respond immediately to 95% of calls	NPIC responded immediately to 99% of calls received during open hours. Occasionally when call volume is high, people may choose to leave a message.	Respond immediately to 95% of calls
Respond to 95% of messages within one business day	NPIC responded within one business day 99% of the time when inquiries were received via voicemail, email, and/or social media.	Respond to 95% of messages within one business day
Recruit/retain highly qualified Pesticide Specialists	NPIC retained three highly qualified pesticide specialists this quarter, in addition to recruiting two new full-time Pesticide Specialists. Costanza Fantoni has a B.Sc. in Chemistry and Environmental Science and Meredith Cocks has a Master of Public Health (MPH) in Environmental and Occupational Health. NPIC also recruited part-time help from a former Pesticide Specialist, Jennifer Gervais, for summer inquiry traffic. Jennifer has a PhD in Wildlife Ecology and an M.Sc. in Environmental Science.	Recruit/retain highly qualified Pesticide Specialists
Perform 1 collaborative outreach/expert consultation efforts	NPIC collaborated with three organizations this quarter to provide outreach and expert risk communication instruction to pesticide applicators, regulators, and educators, including: <ul style="list-style-type: none"> NPIC worked with Texas A&M Extension to share NPIC School and Daycare Poison Safety materials in Texas A&M School IPM Newsletter. NPIC worked with University of Arizona to share NPIC School and Daycare Poison Safety materials in the Supporting Healthy Living and Learning Environments newsletter. After meeting to discuss services and referrals, NPIC and 211info collaborated to share NPIC's information with 211 services nationwide. Subsequently, several 211 regional offices contacted NPIC directly to verify services. 	Perform collaborative outreach/expert consultation efforts
Create marketing plan by end of Year 1	NPIC will develop a marketing plan by the end of Year 1 to ensure the widest-possible utilization of NPIC program outputs, maximizing the public and professional benefit of funded activities.	Create marketing plan by end of Year 1

2. Provide information on a wide variety of pesticide-related subjects including, but not limited to, pesticide products, toxicology, environmental chemistry, safety practices, pesticide regulation, enforcement, risk assessment, risk management, environmental effects, clean-up and disposal, understanding the label, recognition and management of pesticide poisonings, and integrated pest management (IPM).

Anticipated outcomes for Q2	Actual outcomes	Next quarter
Monitor 5-10 relevant publications	In order to stay current, NPIC staff members monitored 19 relevant publications and publication indexing services, including federal register notices (pest), affiliated dockets, newsletters, listervs, and selected journals of relevance in order to stay current.	Monitor 5-10 relevant publications
Evaluate information about pesticide science and regulation (Q3, Q4)	Annually, NPIC will evaluate at least 1,000 articles, documents, and websites in order to maintain and expand up-to-date, reputable, immediately accessible and optimized information about pesticide science and regulation, focusing efforts in Q3 and Q4. In Q2, NPIC evaluated 459 relevant articles, documents, and websites. Thus far in Year 1, NPIC has evaluated 889 articles.	Evaluate information about pesticide science and regulation (Q3, Q4)
Create/update no AI files	No Active Ingredient (AI) files were created or updated. Through monitoring activities, NPIC added 136 new documents to various AI files this quarter.	Create/update 10 AI files
Attend 3-4 CE events	NPIC staff members attended five events for continuing education this quarter, including, two on-campus events, one off-campus event, one in-house presentation, and one webinar.	Attend 4-5 CE events
Track risk-reduction conversations	NPIC tracked certain elements in order to quantify risk-reduction activities. In conversation with callers, pesticide specialists discussed ways to minimize exposure 1,022 times, following the label 917 times, IPM concepts 234 times, and environmental protection (including pollinator protection) 52 times.	Track risk-reduction conversations
Maintain continuous storage capacity	NPIC maintained storage capacity in order to ensure continuous access to NPIC resources by stakeholders, documenting and reporting milestones to inform future efforts for secure, long term data storage and hosting capacity.	Maintain continuous storage capacity

3. Address current and emerging pesticide-related issues and provide federal, state, and local resources on the topics above in Objective 2.

Anticipated outcomes for Q2	Actual outcomes	Next quarter
Discuss "Important and Interesting" cases	NPIC specialists were polled about trends and discussed 100% of cases flagged as "important and interesting" as a team. Specialists discussed 13 cases from Q2. See selected cases of interest on page 17.	Discuss "Important and Interesting" cases
Discuss trends and data with OPP as part of quarterly coordination meetings (QCM)	NPIC discussed potential trends and data with OPP during the annual site visit to EPA on June 19, 2019. During the site visit Division Director's meeting, NPIC discussed incident and inquiry trends for GY5 of the prior project period (2018-2019). In addition, NPIC highlighted call trends related to mothballs, glyphosate litigation and glyphosate on cereal, converting farmland to hemp, and professionals seeking communication techniques from NPIC.	Discuss trends and data with OPP as part of quarterly coordination meetings (QCM)
Share noteworthy cases with EPA	NPIC shared 15 noteworthy cases with the EPA Project Officer.	Share noteworthy cases with EPA
Compile statistics and submit timely reports	NPIC compiles summary statistics about inquiries received on a quarterly and annual basis. This quarterly report was submitted within 30 days of the quarter's closure, by September 14, 2019.	Compile statistics and submit timely reports
Submit VIRP and Eco-reports to EPA, quarterly	Veterinary professionals submitted six incident reports using NPIC's Veterinary Incident Reporting Portal. Eight incident reports were submitted using NPIC's Ecological Incident Reporting Portal. All of these are included in supplements to this quarterly report.	Submit VIRP and Eco-reports to EPA, quarterly
Provide special reports to EPA and state pesticide regulatory agencies within 2 weeks	NPIC provided three special reports this quarter within four business days. NPIC received data requests from EPA OPP Health Effects Division (2) and the Oregon Department of Agriculture.	Provide special reports to EPA and state pesticide regulatory agencies within 2 weeks
Promote the availability of NPIC data (Q4)	Annually, NPIC will promote the availability of inquiry data to state and tribal agencies (Q4).	Promote the availability of NPIC data (Q4)
Review project deliverables to coordinate with AAPCC and OHSU	NPIC continued to monitor and improve its working relationship(s) with AAPCC and OHSU, ensuring that baseline expectations were met and/or exceeded.	Review project deliverables to coordinate with AAPCC and OHSU
Make timely referrals to appropriate state and local resources (Q3)	Specialists will make timely and appropriate referrals with 5% margin of error. This standard will be evaluated as part of annual staff evaluations in Q3.	Make timely referrals to appropriate state and local resources (Q3)

4. Provide reputable, science-based information in a manner understandable to a lay audience to help people make informed decisions.

Anticipated outcomes for Q2	Actual outcomes	Next quarter
Coordinate with OPP on proposed projects	<p>NPIC and OPP coordinated multiple priorities during the annual site visit (NPIC to OPP) on June 19, 2019. Priorities were emphasized for notification to EPA, including occupational exposures, professional applications resulting in incidents, peanut allergies related to bait products, Seresto flea collar incidents, and reports of dead or missing bees.</p> <p>Other priorities included creating materials related to pool chemicals and pollinator protection.</p> <p>Additionally, Kaci Buhl presented a 2-hour training on risk communication for OPP and OCSPP staff. Such an event between NPIC and OPP had been of interest in the past.</p> <p>As a follow-up discussion with the Field and External Affairs Division's Communication Services Branch, NPIC shared details of caller confusion or concerns about pesticide labels. This information was expanded and provided for presentation at OPP's Labeling Consistency Committee meeting in July. In collaboration with OPP, NPIC will flag complaints about labels that have false or misleading information.</p>	Coordinate with OPP on proposed projects
NPIC will create/update 40 new and/or translated items per year, which may include topic summaries, FAQs, articles, unique social media posts, content for smart speakers, and other media, with 90% of items meeting reading-level targets.		
Create/update 1 webpage	<p>NPIC created two new webpages this quarter titled:</p> <ul style="list-style-type: none"> • Adjuvants in Pesticides • Mites 	Create/update 2-4 webpages
Develop no new graphic materials	NPIC developed no new graphic materials this quarter.	Develop no new graphic materials
Develop no new fact sheets	NPIC developed no new fact sheets this quarter.	Develop no new fact sheets
Formalize procedures for reference selection in fact sheets	NPIC is currently conducting scoping work to formalize procedures for selecting references in fact sheets.	Formalize procedures for reference selection in fact sheets

4. Provide reputable, science-based information in a manner understandable to a lay audience to help people make informed decisions (cont'd).

Anticipated outcomes for Q2	Actual outcomes	Next quarter
Post 1-3 items per week in social media venues	NPIC posts new items in social media venues (Facebook and Twitter) promoting safe use practices, IPM, and pesticide label comprehension. This quarter NPIC uploaded 67 posts, averaging 5 per week.	Post 2-4 items per week in social media venues
Develop and deliver no webinars	NPIC did not deliver a webinar this quarter.	Develop and deliver no webinars
Remove/replace 100% of broken links	NPIC reviewed 100% of web content and removed or replaced over 196 broken links this quarter.	Remove/replace 100% of broken links
Update 50 contacts	In order to provide the best referrals when appropriate, NPIC actively verifies/updates contact lists (i.e., county extension, vector control districts, manufacturers) on a routine basis. This quarter, NPIC updated more than 100 contacts, including State Health Agencies and Soil and Water Districts.	Update 50 contacts
Ensure continuous access to NPIC apps	NPIC ensured continuous access to NPIC apps by stakeholders, maintaining software applications, tools, and mobile apps.	Ensure continuous access to NPIC apps

5. Collect and disseminate quality pesticide incident data via a rigorous and well-defined data collection system.

Anticipated outcomes for Q2	Actual outcomes	Next quarter
Capture 80% of human demographics	NPIC specialists were able to document demographic information for 99% of human incidents, including age and/or gender. Callers occasionally decline to provide personal information such as age.	Capture 80% of human demographics
Capture 80% of incident information	“Incident information” includes information such as symptoms, time to onset of symptoms, and circumstances surrounding reported exposures. Among 501 reported incidents involving humans or animals, NPIC specialists were able to capture the symptom/scenario information in 94% of cases..	Capture 80% of incident information
Capture 80% of product information	NPIC specialists were able to collect product information for 91% of reported incidents.	Capture 80% of product information
Capture 80% of location	NPIC specialists were able to document the location for 94% of reported pesticide incidents.	Capture 80% of location
Capture 70% of exposure routes	Among the 501 reported incidents involving humans or animals, NPIC specialists were able to capture the exposure route in 84% of cases.	Capture 70% of exposure route

5. Collect and disseminate quality pesticide incident data via a rigorous and well-defined data collection system (cont'd).

Anticipated outcomes for Q2	Actual outcomes	Next quarter
Classify reported signs/symptoms in terms of severity and certainty	<p>NPIC used standard operating procedures and rigorous quality control to classify reported signs/symptoms in terms of severity (severity index) and in terms of their relationship to the reported exposures (certainty index).</p> <p>NPIC assigned a severity index 100% of the time when signs/symptoms were described (587 times).</p> <p>NPIC assigned a certainty index 100% of the time when signs/symptoms were described, and they could be compared to published reports about the active ingredient(s) involved (247 times).</p>	Classify reported signs/symptoms in terms of severity and certainty
Incorporate user feedback for the VIRP and Eco-portals (Y2, Y4)	NPIC responded to user feedback by updating/improving the Eco-Portal and VIRP, as needed, including suggestions by OPP staff during the site visit.	Incorporate user feedback for the VIRP and Eco-portals (Y2, Y4)
Monitor data quality and take steps to ensure high standards are met	NPIC produced internally routed human and animal incident reports in coordination with Dr. Berman (OHSU), highlighting any changes in coding that were made in the QA process.	Monitor data quality and take steps to ensure high standards are met
Deliver 1-2 quality assurance exercises lead by QA/QC Specialist	This quarter, the QA/QC facilitator led two training exercise(s) during staff meetings to facilitate consistency in data quality.	Deliver 1-2 quality assurance exercises lead by QA/QC Specialist
Conduct LARs to ensure data quality (Q3)	<p>Log Assessment Reviews (LARs) will be conducted as part of regularly scheduled annual staff evaluations in Q3 (see Objective 6), including quantifiable measures of data completeness and coding consistency.</p> <p>In addition, formally graded LARs were completed for each new Specialist, twice, in order to establish consistent habits in coding and data entry, including timely and appropriate referrals with 5% margin of error.</p>	Conduct LARs to ensure data quality (Q3)

6. Provide exceptional customer service by integrating professionalism, teamwork, integrity, accountability, and a strong commitment to the public, as well as to the professional and medical communities.

Anticipated outcomes for Q2	Actual outcomes	Next quarter
Develop and execute a rigorous training program	NPIC recruited and hired two highly qualified pesticide specialists this quarter, in addition to hiring a highly-skilled former Pesticide Specialist for summer help. All training materials were updated, including the NPIC training manual, "stop points," exercises, and mentored practice scenarios. All NPIC staff participated in training and mentoring new hires and primary training was completed within 6 weeks.	Develop and execute a rigorous training program
Complete one evaluation event through 3rd-party assessment, yearly	NPIC evaluated customer service skills through use of 3rd-party professional assessment, conducted by BestMark, Inc. Amy Cross worked with BestMark, Inc. to develop a customized assessment questionnaire for shoppers and received comprehensive reports for each Pesticide Specialist. Shoppers evaluated Specialists on customer service skills, including the ability to determine caller's needs, provide customized information, professionalism, efficiency, and overall effectiveness. Final reporting will be available for OPP by end of Q4, GY1.	Complete one evaluation event through 3rd-party assessment, yearly
Evaluate staff members annually (Q3)	NPIC will comprehensively evaluate each staff member annually, including quantified measures of data collection skills (see Objective 5), referral appropriateness, customer service skills, and continuing education measures.	Evaluate staff members annually (Q3)
Site visit to EPA in GY1	Key personnel from NPIC visited OPP this quarter on June 19, 2019, including the Director, Assistant Director, and Project Coordinator.	Site visit to EPA in GY2

Difficulties, Deviations, and Departures

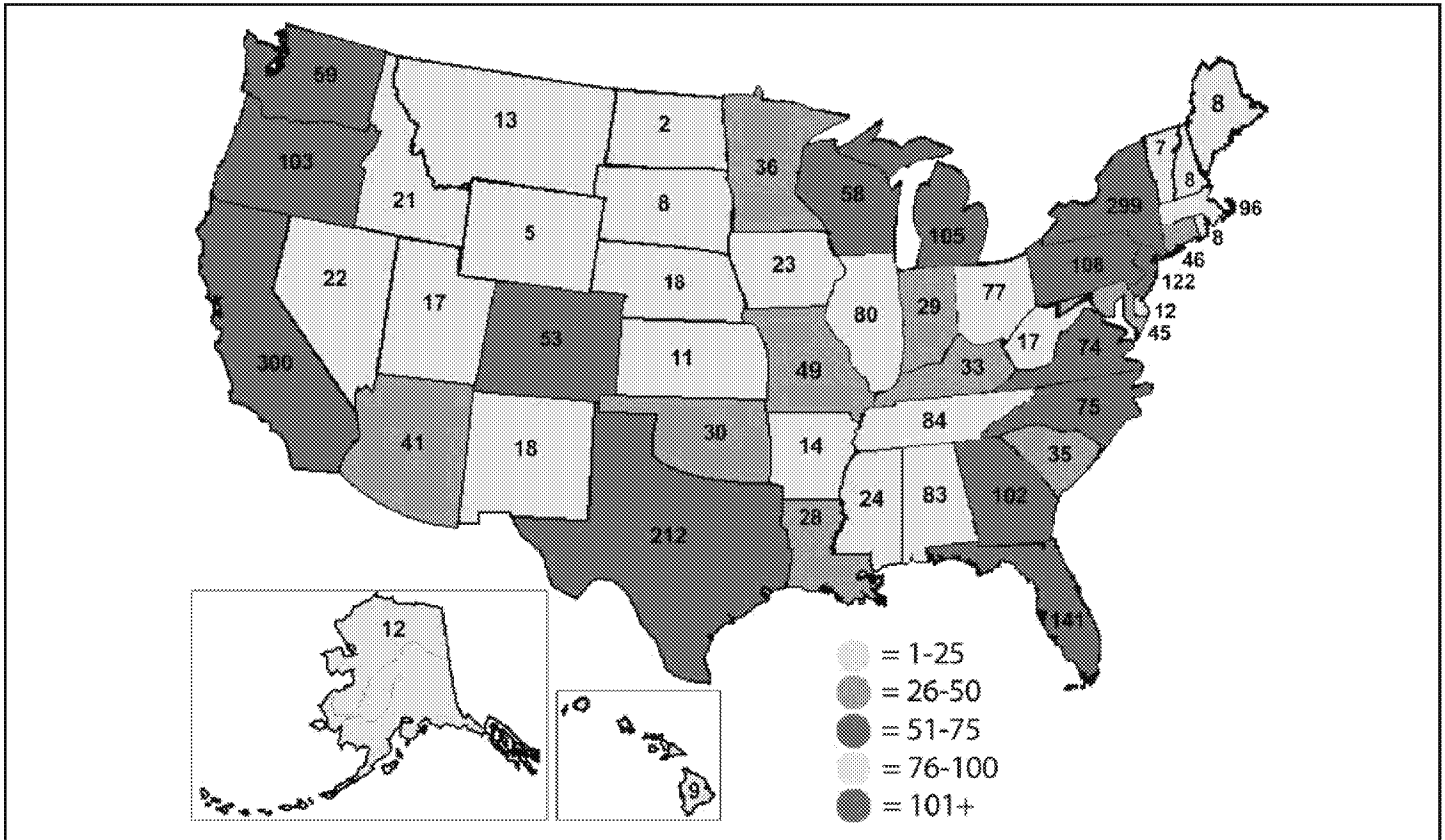
April Strid, M.Sc., departed from NPIC this quarter after a 2.5-year tenure. Efforts to recruit and train her replacement prior to her departure were successful.

Two targeted efforts to recruit a Spanish-fluent Pesticide Specialist were unsuccessful. NPIC will continue to prioritize hiring Spanish-speaking specialists in addition to ongoing use of real-time translation services through LanguageLine Solutions®.

Pesticide Data

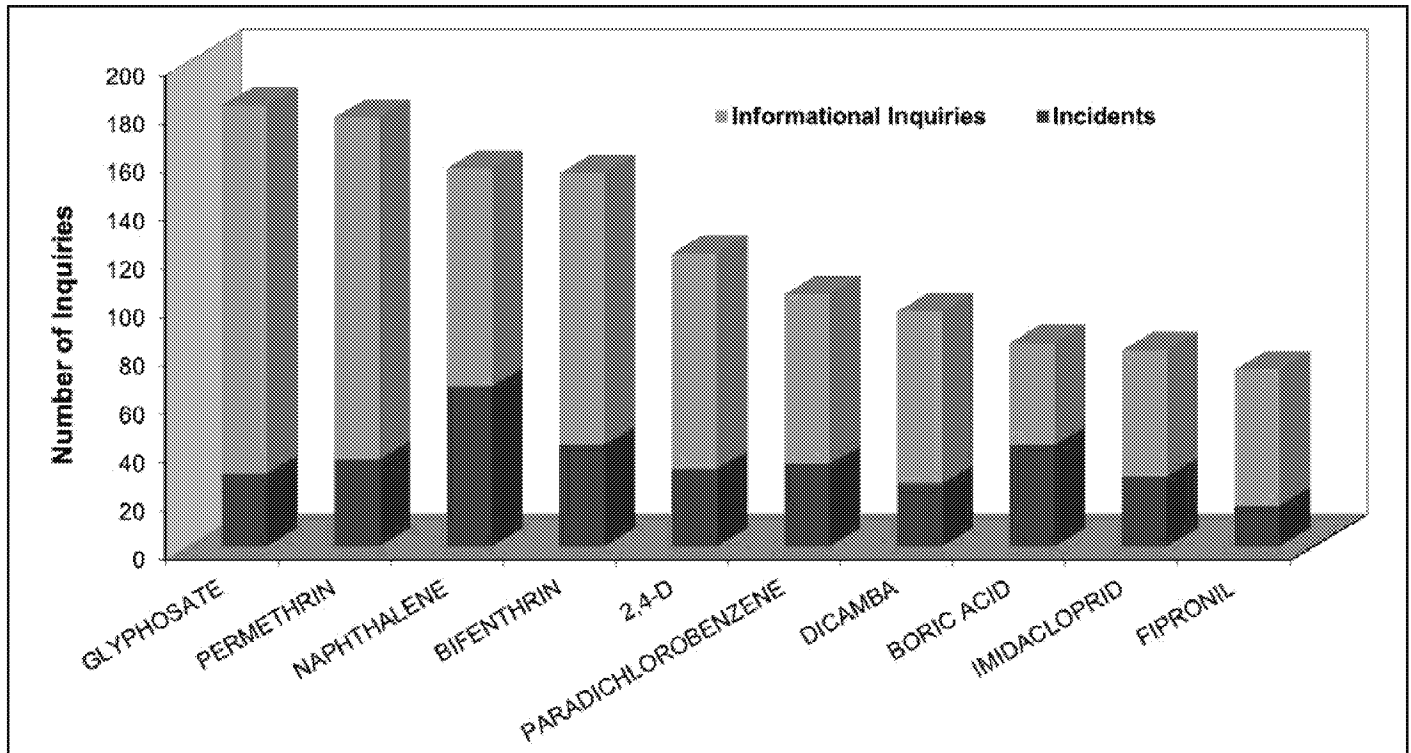
Inquiries by State

The map below represents inquiries from each state when identified.



Not pictured: Washington DC (13) and Puerto Rico (5)

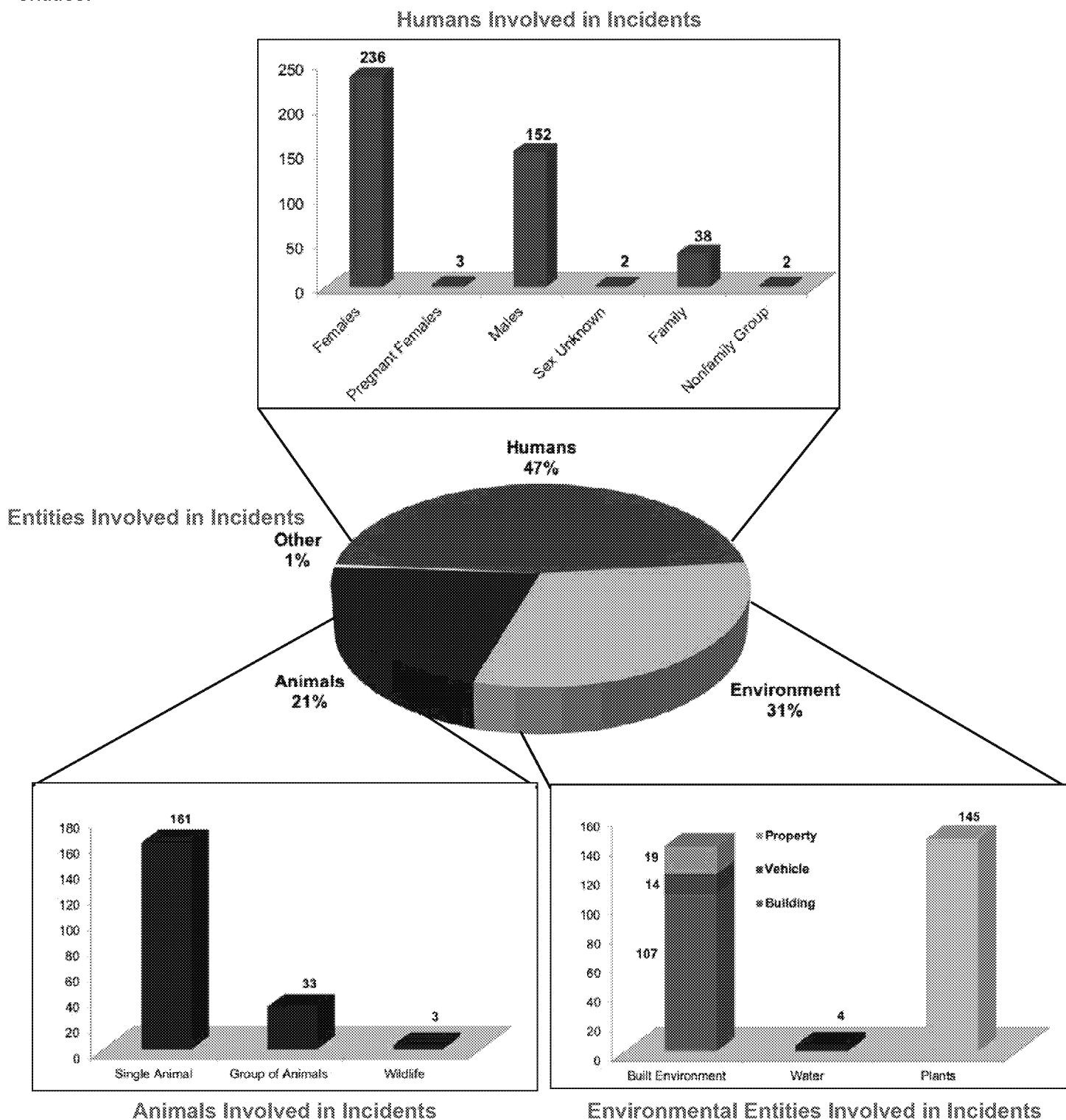
Top 10 Pesticide Active Ingredients for All Inquiries



Of the 3,556 inquiries received, 81% were informational, 18% were incidents, and 1% were other. Wrong numbers are characterized as "Other."

The chart and graphs below provide a summary of entities involved in pesticide incidents reported to NPIC this quarter. A pesticide incident is defined as: 1) any unintended pesticide exposure, 2) a pesticide exposure with an adverse effect, 3) spills, and 4) misapplications.

Of the 923 entities, 47% were human, 21% were animals, and 31% were environmental nontarget entities. Other entities (1%) are miscellaneous items (i.e., sidewalk, food). Pesticide incidents may involve multiple entities.



There were 638 pesticide incidents reported, involving 923 exposed entities (people, animals, buildings, plants, soil, and water)

Total = 923 entities

Human and animal entities exposed to a pesticide with at least one known active ingredient, with reported signs/symptoms.

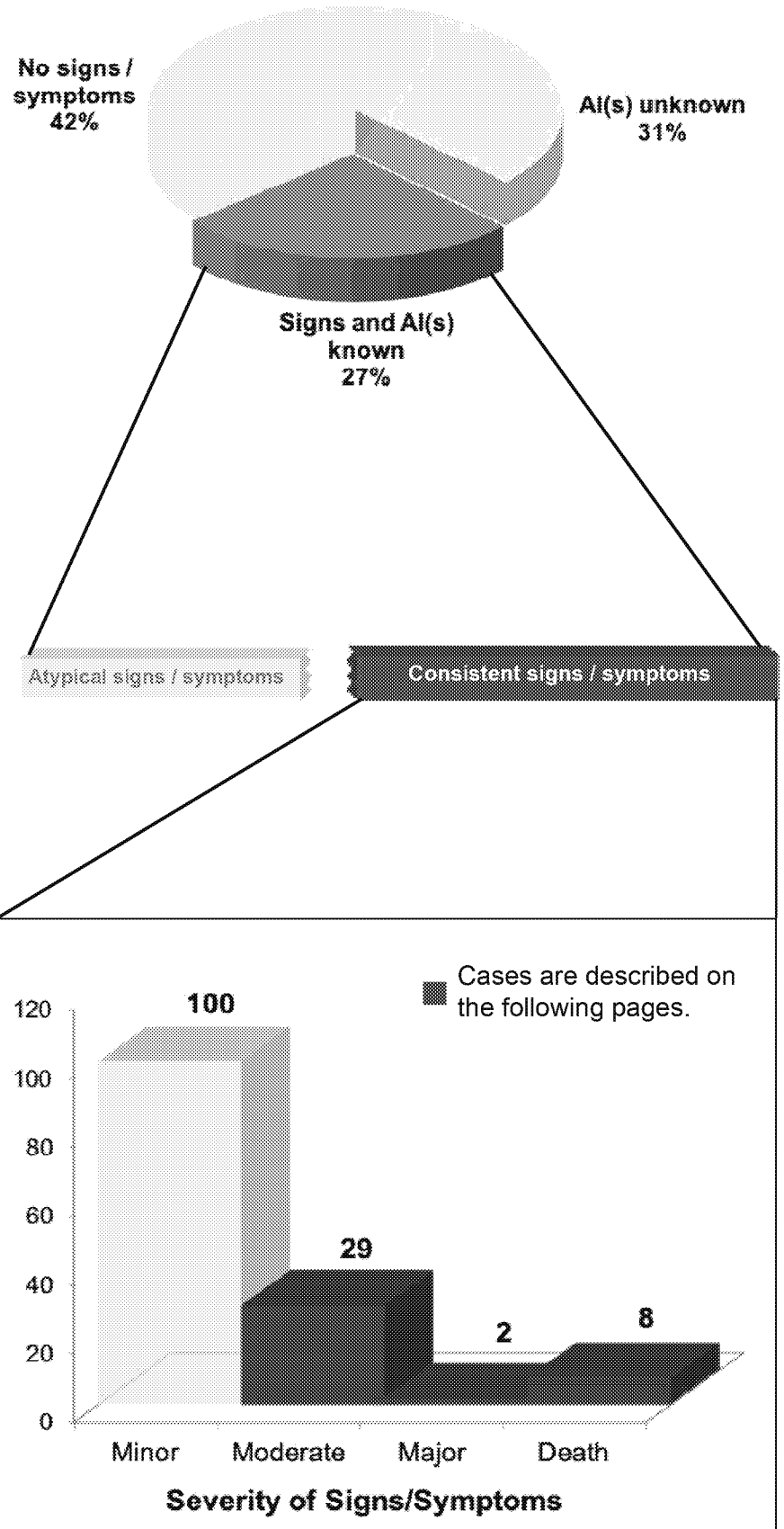
Total = 247 entities

Signs and symptoms are compared to the open literature, including fact sheets, case reports, textbooks, and articles. Furthermore, the timing of onset and duration are considered.

Human and animal entities exposed to a known pesticide with reported signs/symptoms that were **consistent** with reports in the literature for that pesticide.

Total = 139 entities

The following page describes the 39 human and animal entities represented by the red bars.



NPIC incidents with compatible signs/symptoms that were greater than "minor" in severity

Pesticide Product	Active Ingredient	Incident Type	Entity ¹	Certainty Index	Severity Index	State	Log Number ²
HDX LAWN MULTI-INSECT KILLER	BIFENTHRIN	Exposure: Ingestion	Single Animal	Consistent	Moderate	CA	3272
N/A	DEET	Exposure: Inhalation	Female	Consistent	Moderate	VA	3508
DR. T'S SNAKE-A-WAY SNAKE REPELLING GRANULES	SULFUR NAPHTHALENE	Exposure: Inhalation	Single Animal	Consistent	Moderate	NC	3562
DOUBLE TAKE II CRAWLING INSECT KILLER	TETRAMETHRIN PIPERONYL BUTOXIDE PERMETHRIN	Exposure: Inhalation	Female	Consistent	Moderate	FL	3651
TRIMEC 992 BROADLEAF HERBICIDE LESCO CROSSCHECK PLUS MULTI-INSECTICIDE DIMENSION 2EW	MECOPROP DITHIOPYR DICAMBA BIFENTHRIN 2,4-D	Exposure: Possible	Group of Animals	Consistent	Death	MA	3792
TRIMEC 992 BROADLEAF HERBICIDE LESCO CROSSCHECK PLUS MULTI-INSECTICIDE DIMENSION 2EW	MECOPROP DITHIOPYR DICAMBA BIFENTHRIN 2,4-D	Exposure: Possible	Single Animal	Consistent	Death	MA	3792
TRES PASITOS	ALDICARB	Exposure: Ingestion	Single Animal	Consistent	Death	PR	4072
N/A	DEET	Exposure: Dermal	Female	Consistent	Moderate	MI	4314
FRONTLINE PLUS	METHOPRENE FIPRONIL	Exposure: Dermal	Single Animal	Consistent	Moderate	CA	4455
N/A	PENTACHLOROPHENOL	Occupational Exposure Exposure: Inhalation Exposure: Dermal	Male	Consistent	Moderate	CN	4470
INTENSITY POST-EMERGENCE GRASS HERBICIDE GOAL 2XL HERBICIDE BROCLEAN	OXYFLUORFEN CLETHODIM BROMOXYNIL	Exposure: Inhalation	Family	Consistent	Moderate	ID	4505

1. Human entities are described as "male" and "female," regardless of the person's age.

2. When a log number appears in the table more than once, it reflects multiple exposed entities reported in a single incident.

NPIC incidents with compatible signs/symptoms that were greater than "minor" in severity

Pesticide Product	Active Ingredient	Incident Type	Entity ¹	Certainty Index	Severity Index	State	Log Number ²
INTENSITY POST-EMERGENCE GRASS HERBICIDE GOAL 2XL HERBICIDE BROCLEAN	OXYFLUORFEN CLETHODIM BROMOXYNIL	Exposure: Inhalation	Male	Consistent	Moderate	ID	4505
INTENSITY POST-EMERGENCE GRASS HERBICIDE GOAL 2XL HERBICIDE BROCLEAN	OXYFLUORFEN CLETHODIM BROMOXYNIL	Exposure: Inhalation	Male	Consistent	Moderate	ID	4505
MERIT 2F INSECTICIDE	IMIDACLOPRID	Exposure: Possible	Single Animal	Consistent	Moderate	TX	4565
SERESTO FLEA COLLAR	IMIDACLOPRID FLUMETHRIN	Exposure: Dermal	Single Animal	Consistent	Moderate	NY	4711
HI-YIELD MALATHION 55%	MALATHION	Exposure: Inhalation Exposure: Dermal	Female	Consistent	Moderate	KS	5056
HI-YIELD MALATHION 55%	MALATHION	Exposure: Inhalation	Male	Consistent	Moderate	KS	5056
SUPER-FINE SPRAY OIL BIFEN IT	MINERAL OIL BIFENTHRIN	Drift	Group of Animals	Consistent	Death	VA	5184
N/A	COPPER SULFATE	Exposure: Inhalation Exposure: Ingestion Exposure: Dermal	Wildlife	Consistent	Death	CN	5193
ENOZ MOTHBALLS	PARADICHLOROBENZENE	Exposure: Inhalation	Male	Consistent	Moderate	CA	5419
ENOZ MOTHBALLS	PARADICHLOROBENZENE	Exposure: Inhalation	Family	Consistent	Moderate	CA	5419
ENOZ MOTHBALLS	PARADICHLOROBENZENE	Exposure: Inhalation	Female	Consistent	Moderate	CA	5419
BIFENTHRIN TC INSECTICIDE/ TERMITICIDE	BIFENTHRIN	Misapplication: PCO	Group of Animals	Consistent	Death	DE	5603
N/A	DIAZINON	Exposure: Inhalation Exposure: Dermal	Male	Consistent	Major	MI	5689
N/A	BROMADIOLONE	Exposure: Ingestion	Single Animal	Consistent	Death	CA	5690

1. Human entities are described as "male" and "female," regardless of the person's age.

2. When a log number appears in the table more than once, it reflects multiple exposed entities reported in a single incident.

NPIC incidents with compatible signs/symptoms that were greater than "minor" in severity

Pesticide Product	Active Ingredient	Incident Type	Entity ¹	Certainty Index	Severity Index	State	Log Number ²
BONIDE SUF 15	PIPERONYL BUTOXIDE D-PHENOTHIN	Exposure: Inhalation	Male	Consistent	Moderate	NH	5699
FRONTLINE	FIPRONIL	Exposure: Dermal	Single Animal	Consistent	Moderate	IN	5715
PETACTION PLUS FOR DOGS	METHOPRENE FIPRONIL	Exposure: Dermal	Single Animal	Consistent	Death	CO	5819
N/A	DICAMBA 2,4-D	Exposure: Ocular Exposure: Inhalation Exposure: Dermal	Female	Consistent	Moderate	MD	5842
STERIFAB SNIPER DSV	ISOPROPANOL DDAC D-PHENOTHIN CHLORINE DIOXIDE ADEAC	Exposure: Unknown	Female	Consistent	Moderate	CA	5943
K9 ADVANTIX II	PYRIPROXYFEN PERMETHRIN IMIDACLOPRID	Exposure: Dermal	Single Animal	Consistent	Moderate	OR	6020
TALSTAR PROFESSIONAL	BIFENTHRIN	Exposure: Ocular Exposure: Inhalation Exposure: Dermal	Female	Consistent	Moderate	IL	6042
HOT SHOT FOGGER 6 WITH ODOR NEUTRALIZER	TETRAMETHRIN CYPERMETHRIN	Exposure: Inhalation	Male	Consistent	Moderate	NY	6114
HOT SHOT FOGGER 6 WITH ODOR NEUTRALIZER	TETRAMETHRIN CYPERMETHRIN	Exposure: Inhalation	Male	Consistent	Moderate	NY	6114
PROAXIS	GAMMA-CYHALOTHRIN	Exposure: Inhalation Exposure: Dermal	Male	Consistent	Moderate	MO	6206
ENOZ PARA	PARADICHLOROBENZENE	Exposure: Ingestion	Single Animal	Consistent	Moderate	VA	6244
BONIDE PYRENONE GARDEN SPRAY CONCENTRATE	PYRETHRINS PIPERONYL BUTOXIDE	Exposure: Dermal	Female	Consistent	Moderate	NY	6378
SERESTO FLEA COLLAR	IMIDACLOPRID FLUMETHRIN	Exposure: Dermal	Single Animal	Consistent	Moderate	CA	6528
N/A	ETHOFENPROX	Exposure: Dermal	Single Animal	Consistent	Major	GA	6540

1. Human entities are described as "male" and "female," regardless of the person's age.

2. When a log number appears in the table more than once, it reflects multiple exposed entities reported in a single incident.

Selected Cases of Interest

Date of Inquiry:	6/24/19	Certainty:	N/A
Log Number:	4839	Product(s):	ROUNDUP EXTENDED CONTROL
Location:	HANOVER, MA	AI(s):	GLYPHOSATE

Narrative: Caller seeking health risk and cleanup information regarding accidental application of Roundup Extended Control (active ingredient glyphosate, per NPRO) to his grill by his father-in-law and asked if he can clean the grill or if it would be safer to dispose of it and purchase a new one. Caller reported he purchased the Roundup in a large container with a hand pump sprayer and the sprayer stopped working when the product container had about 3/4 of the product remaining. To continue using the Roundup, he poured about "1 inch" in the bottom of an empty Clorox Lemon Cleaner spray bottle for future use. Caller reported yesterday his father-in-law used the bottle labeled "Clorox Lemon Cleaner" to clean the caller's entire grill while outside, not knowing it was actually the Roundup product in the bottle. Caller reported his father-in-law also rinsed the grill with water, but he did not find out about the application until several hours later when he returned home from work.

Discussed risk equation concepts, including toxicity and routes of exposure. Discussed chemical properties of glyphosate, including adsorption to soil and similar organic materials, such as grill char. Discussed the unknown risks of burning off Roundup residues in the char, or anywhere else inside the grill. Discussed the product is not approved for any contact with food. Discussed ways to minimize exposure, ranging from the option to clean and replace the grill rack to the option of not continuing to use the grill to cook food.

Selected Cases of Interest

Date of Inquiry:	7/08/19	Certainty:	N/A
Log Number:	5332	Product(s):	GRAZON D
Location:	STEPHENS, AR	AI(s):	PICLORAM

Narrative: Call dropped, see also log 5269. Caller said that she had applied soil contaminated with Grazon D (active ingredient picloram, no EPA registration number and 3 possible products in NPRO) on her vegetable garden. Caller said that the tomatoes are dying, although the squash and cantaloupe are fine. Caller said that the county extension service had told her that the residual picloram was likely affecting her tomatoes, which are more sensitive than the other plants. Caller asked if it was safe to eat the vegetables. Caller said she has had multiple myeloma for 5 years. Caller said that she (age 56) and her husband (age 56) have eaten a few squashes, and she has frozen some. Caller reported there were no symptoms. Caller said that they retained a company to spray the product in a pasture 3-4 years ago, then this spring they dug up the soil near the cattle feeder to use to amend the vegetable garden.

Discussed the label and the law, including sites of use are where risk assessments have been found to be low if directions followed. Discussed toxicity of picloram, and human health risks (EPA RED Facts: picloram). Discussed mode of action in plants (Herbicide Manual, Roberts). Discussed that processing reduces residues in food, particularly canning.

Caller requested information about picloram and provided email address. Sent requested email, including a copy of the RED Facts sheet and link to Hazardous Substances Data Bank entry. Email response:

Thank you for contacting the National Pesticide Information Center (NPIC) today. As we discussed over the phone, I'm providing additional resources regarding picloram. I have attached the EPA Reregistration Eligibility (RED) Facts document I referred to during our conversation. I have also provided a link below to more information regarding this pesticide:

Hazardous Substances Data Bank

<https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

Enter Picloram in the search box for an extensive record regarding human health and environmental fate of this particular pesticide. A more direct route may be the link below, but in case it is not working, you can use the method just above.

<http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@DOCNO+1151>

If you have additional questions, please contact us at 800-858-7378, Monday - Friday from 8:00am to 12:00pm Pacific Time to speak directly with a Pesticide Specialist.

Quarterly Budget Expenditures

Summary by Quarter:

E0197A

Quarter 2

BDGT Category

May 01, 2019 - July 31, 2019

Personnel	120,782.62
Fringe	75,187.50
Travel	6,258.29
Equipment	-
Supplies (incl. telecom)	3,747.94
Subaward	-
Construction	-
Other	-
Total Direct Charges	205,976.35
Indirect Charges	55,613.61
	261,589.96

Note: This budget reflects the last three full months in which OSU processed expenditures for the National Pesticide Information Center (X8-83947901) and does not exactly align with the quarterly period summarized in this report.

This report includes expenditures under the current cooperative agreement #X8-83947901 (2019-2024). Fiscal resolution details on the previous cooperative agreement #X8-83560101 (2014-2019) will be included in a close-out report from OSU to EPA no later than November 30, 2019. This date is 90 days after the no-cost-extension expired.